

C. A. MYERS.
MACHINE FOR MAKING CAN TOPS AND LABELING THE SAME.

906,648.

APPLICATION FILED MAY 31, 1907.

Patented Dec. 15, 1908.

5 SHEETS—SHEET 1.

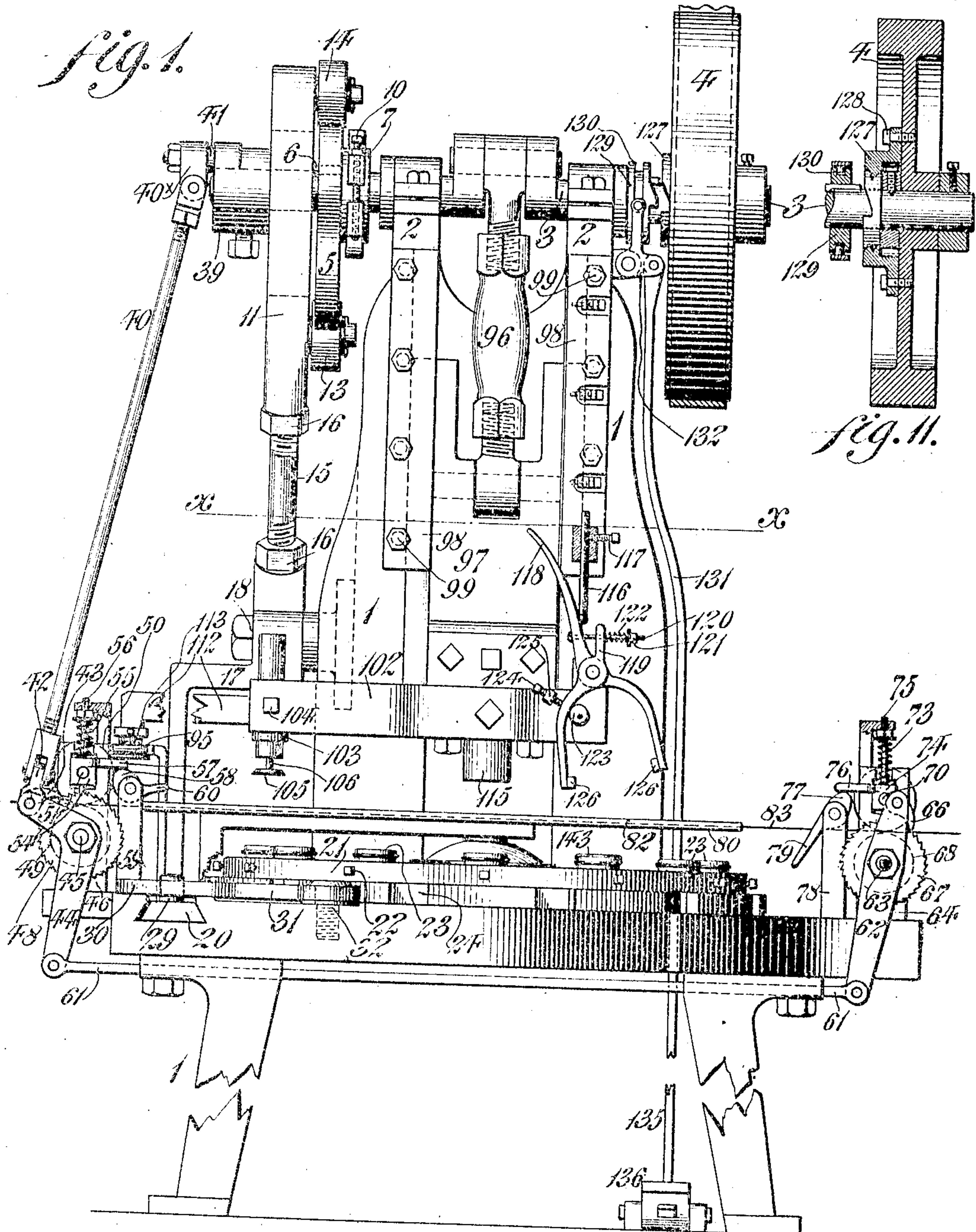
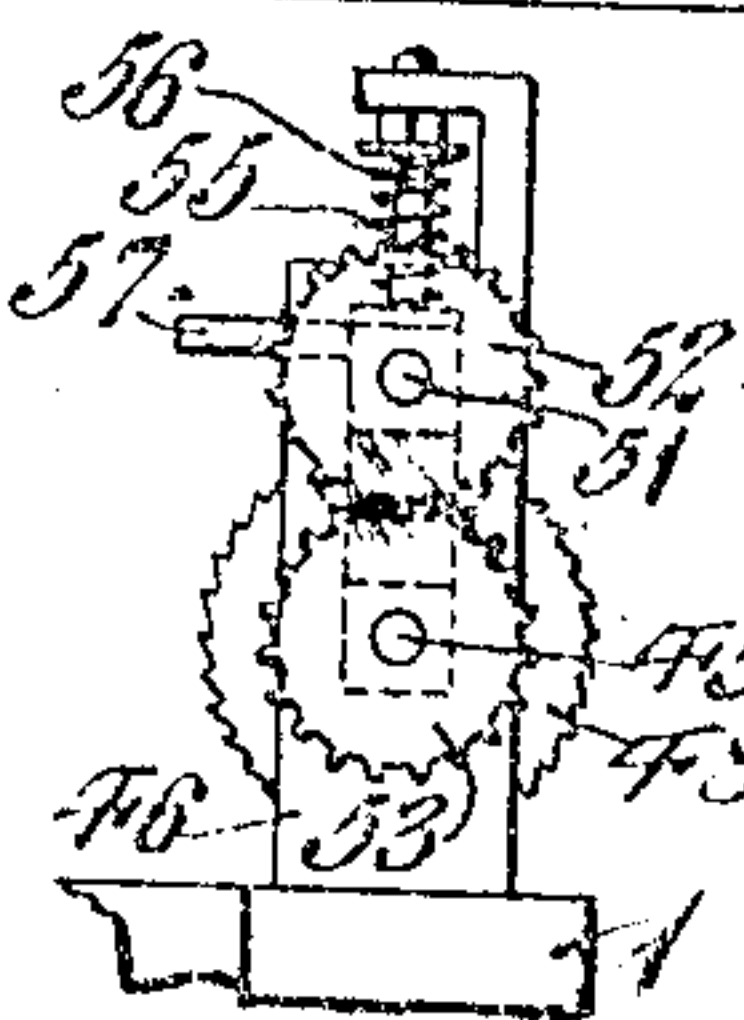


fig. 11.

Witnesses
L. Rouville. fig. 12.
P. E. Nagle.



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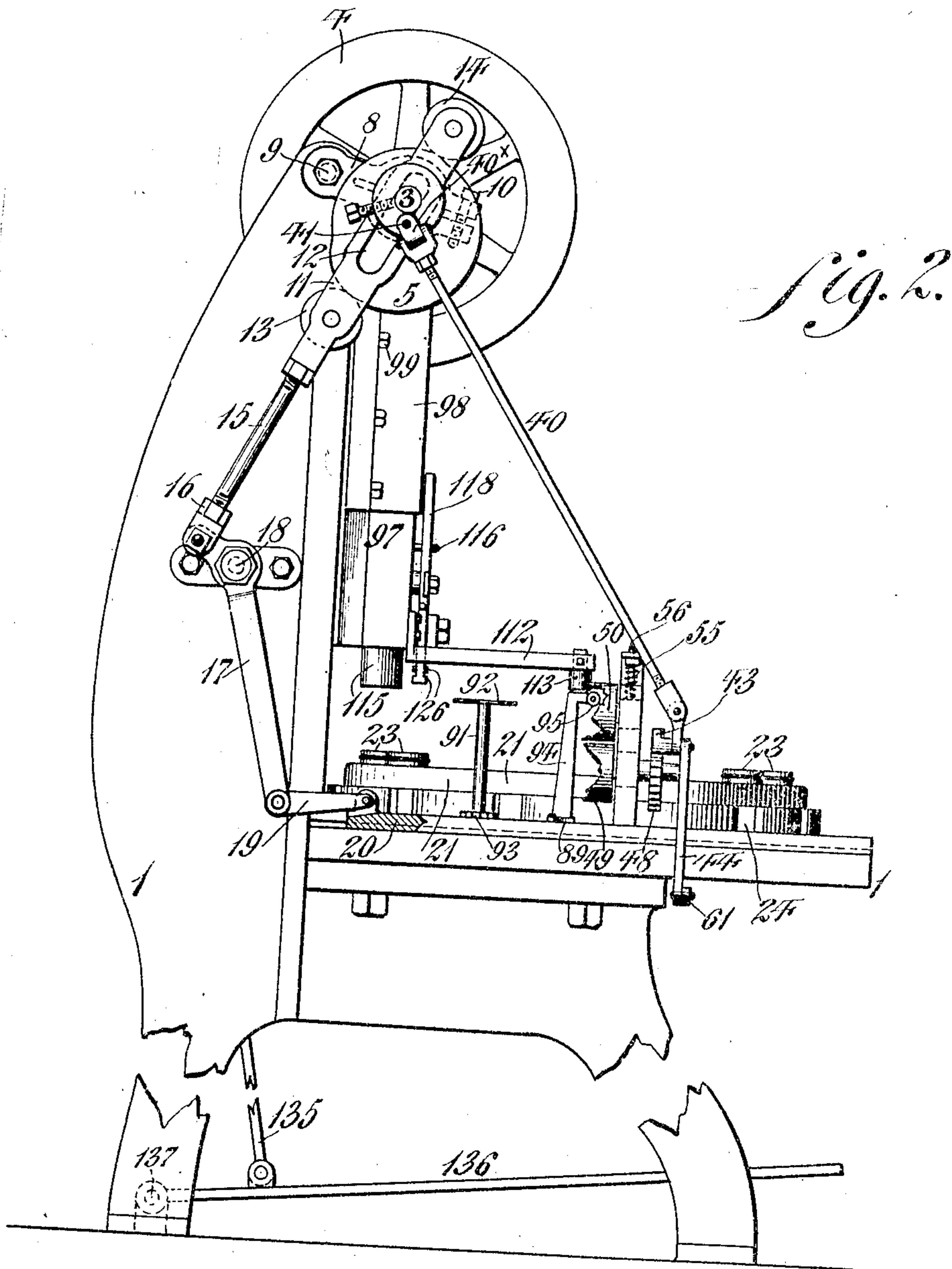


Fig. 2.

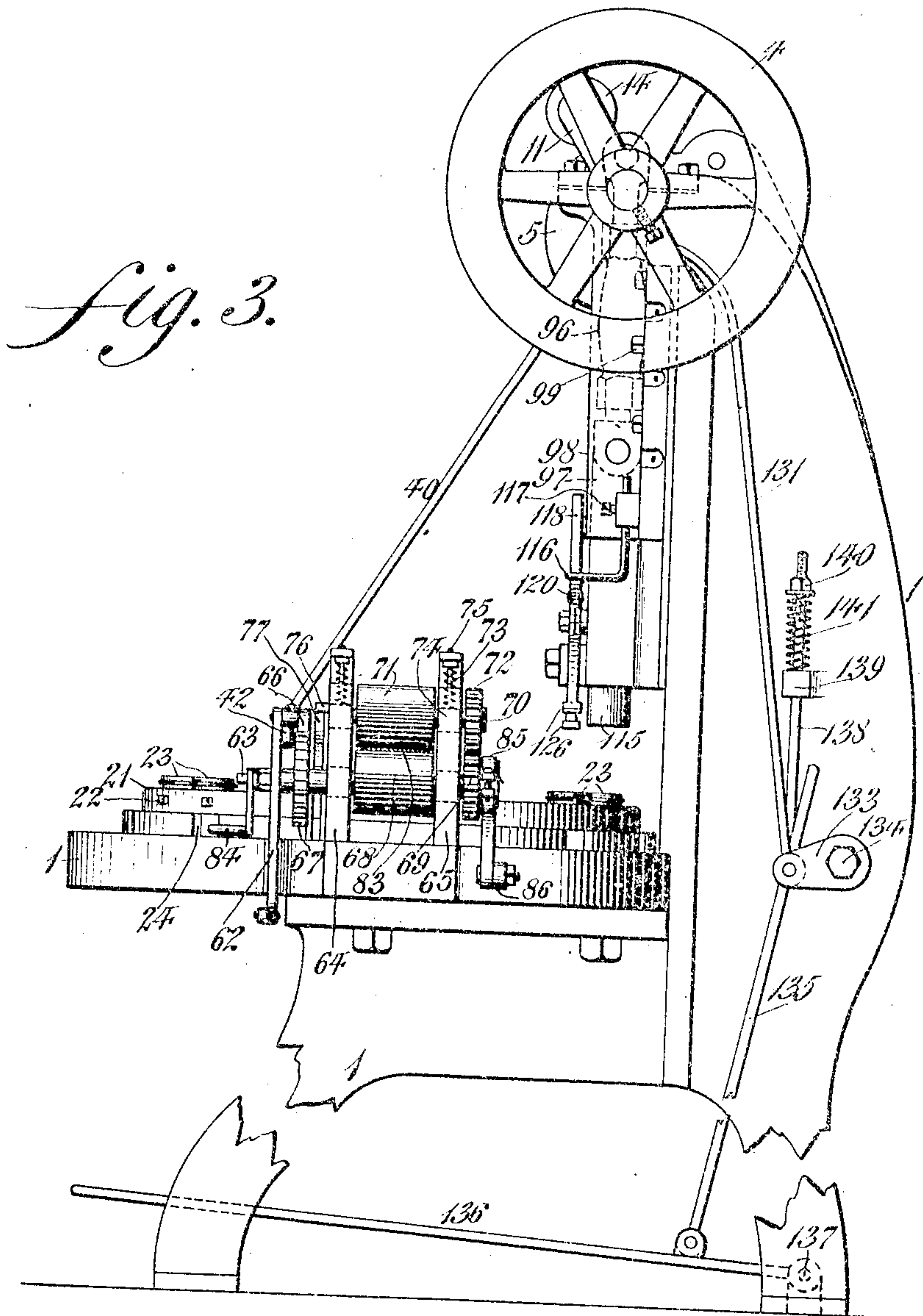
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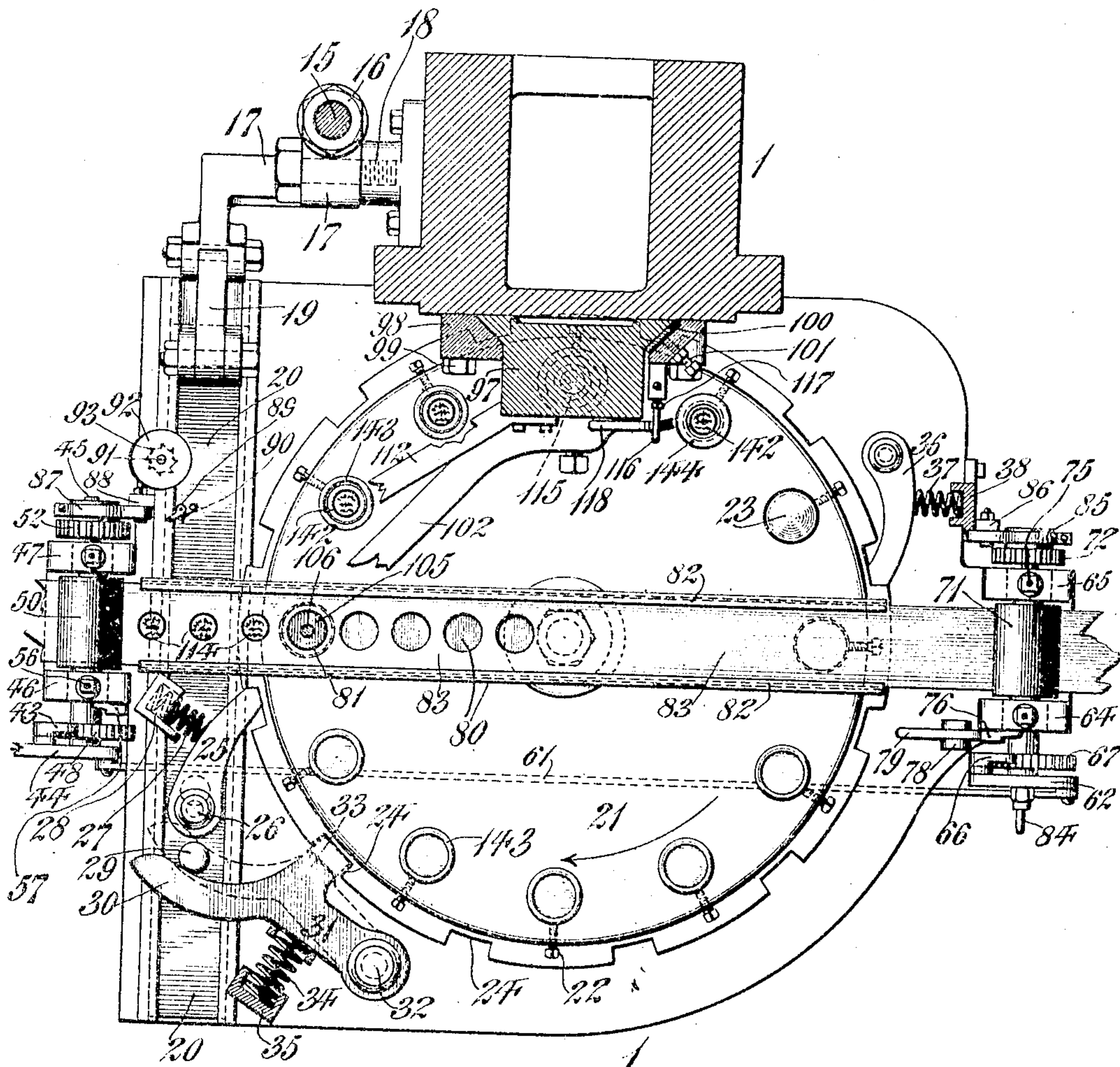
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Fig. 4.

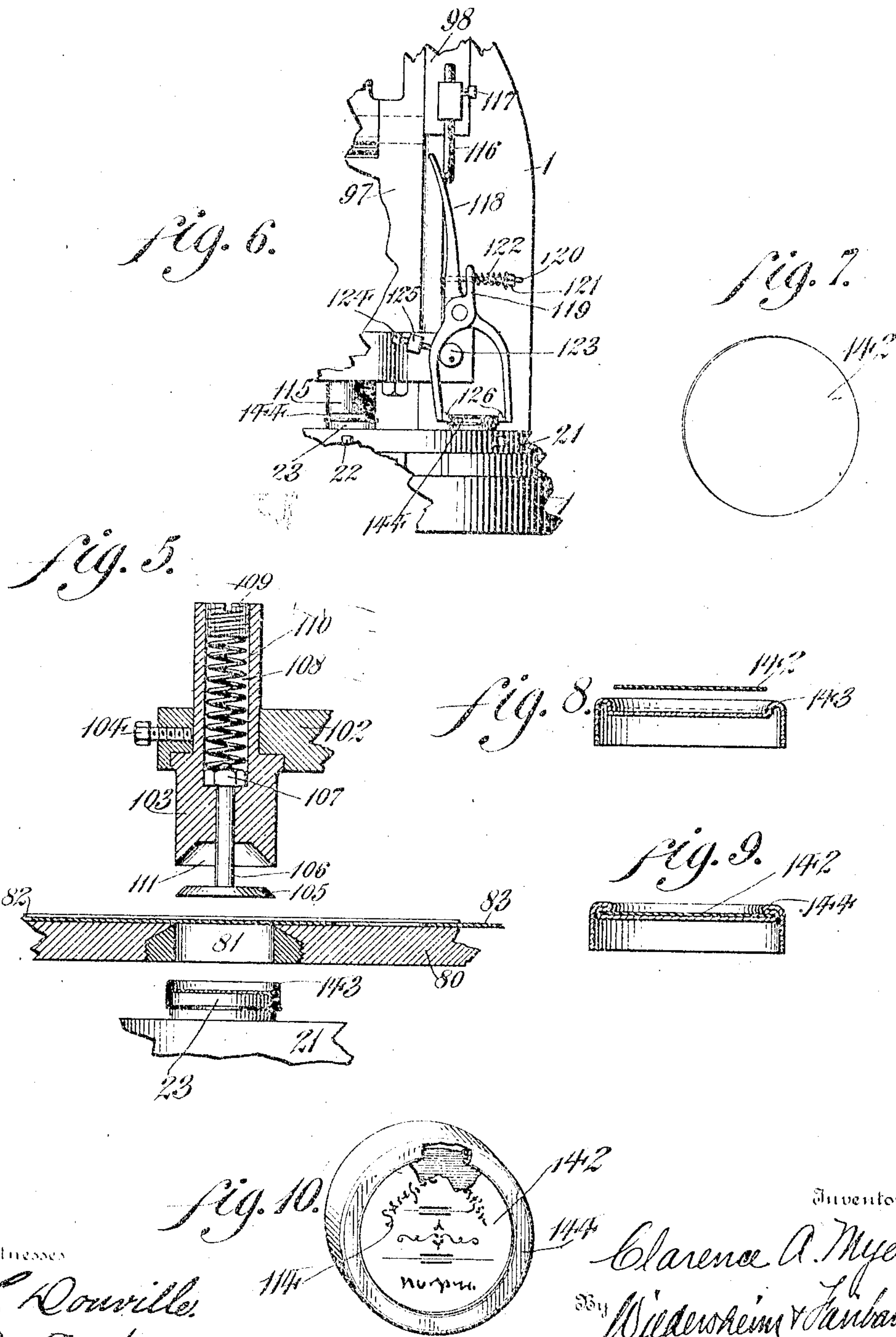


Witnesses
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5 SHEETS—SHEET 5.



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UNITED STATES PATENT OFFICE.

CLARENCE A. MYERS, OF CAMDEN, NEW JERSEY.

MACHINE FOR MAKING CAN-TOPS AND LABELING THE SAME.

No. 906,648.

Specification of Letters Patent.

Patented Dec. 15, 1908.

Application filed May 31, 1907. Serial No. 376,483.

To all whom it may concern:

Be it known that I, CLARENCE A. MYERS, a citizen of the United States, residing at Camden, Camden county, State of New Jersey, have invented a new and useful Machine for Making Can-Tops and Labeling the Same, of which the following is a specification.

My invention consists of a novel construction of a machine adapted to fasten labels or advertising matter on cans or boxes.

It further consists of novel means for printing the matter thereon and of novel means for bringing the same after it is printed to the proper position with respect to the article to which it is to be secured.

It further consists of novel means for rotating and locking in position the table upon which the lids or boxes are mounted.

It further consists of novel means for cutting out the label or advertising matter and placing it in position on the lid or box.

It further consists of novel means for swaging the outer rim of the box for securing the label or advertising matter in place.

It further consists of novel means for removing the completed boxes.

It further consists of novel features of construction, all as will be hereinafter fully set forth.

Figure 1 represents a front elevation of a machine embodying my invention for simultaneously printing and cutting out labels or advertising matter and for securing the same in place on the lid or box. Fig. 2 represents a side elevation thereof on a reduced scale.

Fig. 3 represents a side elevation on a reduced scale of the opposite side thereof. Fig. 4 represents a sectional plan view taken on line $x-x$ Fig. 1. Fig. 5 represents a section of a portion of the device in detached position. Fig. 6 represents a front elevation of a portion of the device showing the means for removing the finished product in a different position from that shown in Fig. 1.

Fig. 7 represents a perspective view in detached position of one of the labels on which the suitable matter is printed. Fig. 8 represents a sectional view of a box and label. Fig. 9 represents a sectional view similar to Fig. 8 but showing the label swaged in place. Fig. 10 represents a perspective view of the completed box having a portion thereof broken away. Fig. 11 represents a sectional view showing the clutch mechanism.

Fig. 12 represents a side elevation of two of the feed rollers.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings, 1 designates the frame of the machine having at its upper end journal boxes 2 in which is mounted a driving shaft 3.

4 designates a pulley loosely mounted on the shaft 3, and connected by a belt in the ordinary manner to the driving mechanism.

5 designates a cam on the shaft 3, said cam being provided with a hub 7 secured to the shaft by suitable means as a screw 6.

8 designates a friction brake secured at one end to the frame at 9 and having a screw 10 for tightening the free ends of the brake, thus adapting the latter to be tightened on the hub 7 and act as a brake therefor.

11 designates a crank arm having a slot 12 therein through which the shaft 3 passes.

13 and 14 designate two rollers secured to the arm 11 and adapted to travel on the opposite surface of the cam 5. The length of the arm 11 may be adjusted by means of the threaded rod 15, lock nuts 16 securing said rod in place.

17 designates a bell crank lever pivoted to the frame at 18 and secured at one end to the rod 15 and at its other end to a link 19 to which latter is secured a slide 20, which is reciprocated by the movement of the cam acting through the bell crank lever 17 and the crank arm 11.

21 designates a table rotatably mounted on the frame 1 and having secured by means of set screws 22 the anvil blocks 23 upon which the lid or box is adapted to rest during the act of receiving the label and the act of swaging, said table having the recesses 24 at suitable intervals.

It is understood that the anvil blocks 23 are brought successively by the rotation of the table into proper position so that the labels cut will be received by the boxes or lids on said block 23 and the swaging tool will contact therewith at the proper time.

Pivoted to the slide 20 at a suitable point, for example 26, is a pawl 25 against which bears a spring 27, the opposite end thereof being situated or retained in a socket 28 also carried by the slide 20, said spring being adapted to hold the free end of the pawl 25 against the circumference of the said table and to cause the said pawl to enter a recess 24 at a suitable time.

31 designates a pawl which is pivoted to the frame of the machine at a suitable point

32 and which is provided with a nose 30 adapted to be engaged by a stud or pin 29 carried by the slide 20, said pawl having a lug or projection 33 which is adapted to be seated in a recess 24 of the table at suitable times, a spring 34 normally causing the said projection to enter one of said recesses, said spring bearing against said pawl and the opposite end being retained in a socket 35 secured to the frame of the machine, it being understood that the pin 29 at the proper time overcomes the tension of the spring 34 to remove the projection 33 from the recess in which it has been seated, whereby the reciprocation of the slide causes the table 21 to be rotated a proper amount by means of the pawl 25 engaging in one of the recesses 24, said projection 33 being first moved from the recess in which it is seated by the engagement of the stud 29 with the nose 30.

36 designates another pawl pivoted to the frame 1 adjacent the table 21 and having a spring 37 bearing against it and normally tending to keep the same in one of the recesses 24, the other end of said spring 37 being retained in a socket 38 suitably secured to the frame 1, said pawl 36 preventing improper rotation of the table.

39 designates a collar mounted on the driving shaft 3 and rotating therewith and having a pin 41 eccentrically mounted therein and having connected therewith a driving rod 40 secured thereto by means of a link 40*, the other end of said rod being connected with a link 42 which carries a pawl 43.

44 designates a bell crank lever secured at one end to the link 42 and is freely mounted on a shaft 45 which latter is carried in the standards 46 and 47 which are supported on the frame 1. Mounted on the shaft 45 is a ratchet wheel 48 which is adapted to be engaged by the pawl 43 in order to be rotated depending upon the movement of the rod 40. Mounted on said shaft 45 is the feed roller 49 which is fixed thereon and which also carries a gear wheel 53 fixed thereto, so that when the shaft 45 is operated, it rotates the roller 49 and the gear wheel 53. 51 designates a shaft movably mounted in said standards 46 and 47 and is situated directly above the shaft 45, said shaft 51, in the present instance, being mounted in the boxes 54 upon which bear springs 55, the other ends of said springs contacting with the top portions of the standards which are provided with pins 56 adapted to guide and hold said springs in proper position. Mounted on the shaft 51 is a roller 50 situated directly above the roller 49 and adapted to co-act therewith, while a gear 52 is also secured to the shaft 51 and is adapted to mesh with the gear 53, whereby when said gear 53 is rotated it imparts motion to the gear 52 and thus to the shaft 51 and the roller 50, which, as stated, is adapted to co-act with the feed roller 49, in order to

properly feed the paper or other material, as will be hereinafter described.

When it is desired to stop the feed, I have provided an arm 57 on one of the boxes 54 which is adapted to be engaged by an eccentric 58 mounted on a standard 59, said eccentric being provided with a suitable actuating means, such as a lever 60, so that by proper movement of the said lever the said eccentric will act to raise the boxes 54 against the tension of the springs and with it the gear 52 and roller 50 so that no motion will be imparted to the same and the feeding will stop as is evident. At the opposite side of the machine, I provide a suitable mechanism to co-act with the mechanism just described for feeding the material, the same being actuated at the same time and I accomplish this by means of a rod 61 which is secured at one end to the end of the bell crank lever 44, the other end being secured to a lever 62 which is freely mounted on a shaft 63 and is provided with a pawl 66 which latter is adapted to engage with the teeth of a ratchet wheel 67 which is secured to the shaft 63, the latter being mounted or journaled in suitable standards 64 and 65 secured to the frame 1 of the machine. On the shaft 63 is mounted a roller 68 and a gear 69, the latter meshing with a gear 72 secured to a shaft 70 which is freely movable with respect to said standards and is journaled in the boxes 74, the latter having the springs 73 pressing thereagainst, the opposite ends of said springs bearing against the upper portions of the standards which are provided with the pins 75, serving to guide and hold the same in proper position.

71 designates a roller carried on the shaft 70 and is adapted to coact with the said roller 68, whereby it will be understood that when the bell crank lever 44 is actuated it operates the lever 62 through the medium of the rod 61 and causes the pawl to actuate the ratchet 67 to rotate the shaft 63 at the same time as the shaft 45 is rotated. This will impart motion to the gear 69 and thus to the gear 72 so that the roller 71 is also rotated, the paper or other material being fed between the rollers 68 and 71 and moved accordingly.

If it is desired to stop the feeding, the rollers 71 and the gear 72 may be removed from contact or engagement with their proper parts by means of a cam 77 mounted in a standard 78 secured on the frame of the machine and engaging or co-acting with an arm 76 secured to one of the bearings 74 so that the shaft 70 is raised and the gear 72 will be out of mesh with the gear 69 thus stopping the feeding, the operation of said eccentric in the present instance being accomplished by actuating the arm 79 in suitable connection therewith.

80 designates a table secured above the rotatable table 21 and having an opening 81

therein, said table being provided with the flanges or guides 82 between which the paper or other material 83 passes, the same being fed by the mechanism just described is thus passed across the rotatable table.

84 designates a crank handle which may be attached to the shaft 63 for the purpose of operating the feeding mechanism by hand if desired.

85 designates a friction brake suitably secured to the frame at 86 and adapted to brake the shaft 63. 87 designates a similar friction brake secured to the frame at 88 and adapted to brake the feed roller shaft 45.

89 designates a pawl secured to the slide 20 and having a spring 90 coacting therewith.

91 designates a rod mounted in the frame having secured thereto an ink plate 92 and having a ratchet wheel 93 which is adapted to coact with the pawl 89 when the slide 20 is reciprocated, whereby the said plate 92 is turned a certain distance at each forward movement of the slide 20.

94 designates an upright secured to the slide 20 carrying an ink roller 95 which contacts with the ink plate when the slide 20 is reciprocated.

96 designates a pitman connected with the crank of the driving shaft 3 at one end and at its other end to a cross head 97 which latter is adapted to reciprocate in the guides formed by the bars 98 secured to the frame by bolts 99.

100 designates a bar mounted in one of the guide bars 98, 101 being a set screw mounted in said guide bar and engaging the bar 100 to hold the screw head in its adjusted position.

102 designates a cross bar secured to the cross head 97 and having an opening at one end adapted to receive a casing 103 which is adjustably held therein by means of a set screw 104.

105 designates a cutter provided with a shank 106 which extends into the casing and has a nut 107 thereon to limit the downward movement thereof, the casing 103 having a chamber 108 in which the nut 107 may move, said chamber being closed by a nut 109 against which bears a spring 110 which also bears on the nut 107 and normally holds the cutter 105 in the position seen in Fig. 5, said casing also having a recess 111 in its lower portion in which is adapted to be seated the cutter at the proper time. The casing 103 is secured to the arm at a point which will hold the cutter directly over the opening 81 in the table 80.

112 designates an arm secured to the cross head 97 and having adjustably secured thereto a printing stamp 113 situated in the path of the movement of the inking roller 95, when in raised position, so that ink is imparted thereto when the slide is reciprocated.

In the drawings 114 designates impressions made by the stamp 113 and before the same has been cut.

115 designates the swaging punch which is adjustably secured to the cross head 97 and which is adapted to reciprocate therewith and to swage the material over the label after the same is in proper position, as seen in Fig. 9.

116 designates a rod adjustably secured to one of the guides 98 by means of a set screw 117 and which is adapted to contact at the proper time with the arm 118 of a pair of tongues or tweezers which are pivoted to the cross head 97 and move therewith, the co-acting arm 119 having a rod 120 freely passing therethrough and having a spring 122 bearing thereagainst and against a nut 121, the opposite end of the rod 120 having a head thereon bearing against the arm 118.

123 designates a cam adjustably secured to the cross bar and against which the arm 119 of the tweezers contacts. 124 designates a screw mounted in a lug 125 on said cross bar and adjusted so that an opening adapted to guide the arm 119 is formed between the end of the screw and the cam 123 against which the arm 119 is held by the said screw 124.

126 designates rubber tips secured to the end of the tweezers adapting the same to firmly grip the completed box without injuring the same.

127 designates one member of a clutch mechanism suitably secured to the driving wheel as by bolts 128 and which is adapted to coact with the other clutch member 129 having a groove 130 therein, said member being keyed or otherwise secured to the driving shaft.

131 designates a rod pivoted to the lever 132 and adapted to move the clutch member 129 into and out of engagement with the co-acting member 127.

133 designates a link secured at one end to the rod 131 and at the other end pivoted to the frame as at 134. 135 designates a rod also secured to the link 133 and connected at its other end to a treadle 136 pivoted to the frame at 137. 138 designates a rod also secured to the link 133 and extending upwardly through a lug 139 fastened to the frame 1.

140 designates a nut on the threaded end of the rod 138 and having interposed between the nut 140 and the lug 139 a spring 141 which acts to normally keep the treadle raised and the clutch member 129 out of contact with the co-acting clutch member 127 which is secured to the driving wheel.

142 designates a label, see Fig. 7, after it is cut the desired size and ready to be secured to the lid of a box, it of course being understood that suitable printed matter may be on the label, as desired.

143 designates the curved rim of the lid of a

box before the descent of the swage 115 and 144 designates the rim of the box after it has been acted upon by the said swage.

The operation is as follows:—It being understood that the driving wheel which is loosely mounted on the shaft 3 is always rotating, the treadle 136 is depressed which will cause the clutch member 129 to engage with its co-acting member 127 and the shaft 3 to revolve. The revolution of the shaft 3 causes the cam 5 secured thereto to rotate. The rollers 13 and 14 which are secured to the crank arm 11 travel on the operative surface of the cam 5 and by means of the bell crank lever 17 and the link 19, the slide is reciprocated forwardly. As the slide 20 moves forward the spring pressed pawl 25 will be carried out of engagement with a recess 24 in which it is actuated and the stud 29 will contact with the nose 30 of the spring pressed pawl 31 and remove the lug 33 of said pawl out of engagement with the recesses 24 with which it is then in engagement. The slide now moves rearwardly and as the pawl 25 is forced outwardly by the spring 27, it will enter one of the recesses 24 and by the continued rearward movement of the slide thus rotate the table 21 in the direction indicated by the arrow, Fig. 4. As the stud 29 will travel with the slide in its rearward movement it releases the nose 30 but the lug 33 is held sufficiently to clear the recess 24 in which it was last situated and contacting with the outer edge of the table will permit rotation thereof until the next recess 24 is reached into which it is immediately forced by the spring 34 and the table is locked in position. The spring pressed pawl 36 which is also adapted to contact with the recesses 24 serves to prevent the rotation of the table to the left but will not prevent the movement of the latter to the right. The boxes or lids to which the labels are to be attached are placed in position on the anvil blocks. As the slide 20 moves forward the pawl 89 will be pressed by the spring 90 against the ratchet wheel 93 and the ink plate 92 secured thereto will be given a certain amount of rotation in order that the roller 95 will contact with a new inking surface. The roller 95 contacts with the type of the printing stamp 113 when the latter is in raised position. The curvature of the cam surface 5 is such that it permits a dwell in the movement of the slide 20 long enough for the ink stamp to do its printing and clear the ink roller 95. The driving rod 40 is actuated by the eccentric 41 secured to the shaft 3. The pawl 43 is actuated by the movement of the rod 40 and rotates the ratchet wheel 48, mounted on the shaft 45. The feed roller 49 is fixed on the shaft 45 and rotates therewith. The gear 53 is also fixed on the shaft 45 and normally meshes with a gear 52 mounted on an adjustable shaft 51

and thus rotates a feed roller 50 secured to the latter. The tape or material which is to be printed passes between the feed rollers 49 and 50, it being apparent that the feed roller 49 is rotated to the right and the feed roller 50 rotated to the left. The bell crank lever 44, rod 61 and lever 62 gives to a pawl 66 the same movement as the pawl 43. The pawl 66 co-acts with the ratchet 67 fixed on the shaft 63 and rotates the latter to the right. The feed roller 68 and the gear 69 which are both fixed on the shaft 63 will also be rotated. The gear 69 normally engages with a gear 72 fixed on a shaft 70 which latter is rotated to the left. The feed rollers on opposite sides of the rotatable table keep the tape which is guided on the table 80 always taut and also causes the portions printed to register with the opening 81 at the proper time.

If it is desired at any time to stop the feed this may be done by actuating the cams 58 and 77 which will raise the rollers 50 and 71 out of contact with their co-acting rollers. If it is desired the tape 83 may be advanced by turning the hand crank 84. As seen in Fig. 4, several impressions are printed before they are drawn by the moving tape under the cutter 105 which will permit each of the same to thoroughly dry before they are cut out. The cross head 97 carrying cross bar 102, the cutter 105, the swaging stamp 115 and the box removing tweezers is reciprocated by means of the crank rod 96 secured to the shaft 3. The cutter 105 cuts out of the material a suitable portion such as 142 upon which the desired design 114 has been printed. This cut piece drops into place on top of the box. On the next reciprocation of the slide 20 another box is brought under the opening 81 and another printed design above the opening so that on the descent of the cutter 105 another printed and cut piece will be placed upon that box. It is evident that if the cutter should not be accurately adjusted the spring 110 will permit the stem 106 to enter the chamber 108 and the cutter 105 to enter the recess 111 which will prevent said cutter from being easily broken. The box having the cut and printed matter thereon will be brought by the rotation of the table under the swaging stamp 115 which latter on its descent bends over the edge of the box on to the material as seen in Fig. 9, so that the same is securely held thereon.

In order to remove the cans or lids after the same have been completed the tweezers are actuated. As these are connected with the cross head 97 they are actuated during the reciprocation thereof. As the cross head descends the arm 118, which is in contact with the stationary rod 116, will be forced towards the arm 119 by action of the spring 122, cam 123 and set screw 124, so that the tips 126 at the end of the tweezers are brought together and firmly grip the fin-

ished article. As the cross head 97 rises the rod 116 bearing on the arm 118 will separate the arms 118 and 119 and thus release the box, the movement of the opening of these arms, however, imparting a slight throw to the box, which will be thrown to one side of the table out of the way of the operative parts.

The printing, cutting and swaging are done at the same operation and on the return stroke the finished boxes are automatically removed. The machine may be stopped almost instantly by depressing the lever 136 and thus throwing the main shaft 3 out of engagement with the driving wheel, the friction of the brake 8 acting on the hub 7. The friction gears 85 and 87 act at the same time to stop the motion of the feed rollers.

It will be understood that what I desire to protect is the printing, cutting and applying the labels to the boxes in a single machine and while I have described, in the present application, the printing mechanism as printing before the labels are cut from the strip, it will be evident that the printing mechanism can be located at any other desired position and the act of printing can take place at any desired time, that is to say, the label could be cut from the strip, applied to the box and then printed and I desire it understood that the present invention is not, therefore, to be limited to the location of the parts nor to the exact construction as herein shown and described, since it will be evident that other instrumentalities may be employed and other arrangements of the parts may be made which will come within the scope of my invention.

Having thus described my invention what I claim as new and desire to secure by Letters Patent, is:—

1. In an organized machine of the character described, a rotary table for supporting the boxes, box supports rotatable with said table means for printing the labels, means for cutting said labels and placing them on the boxes and means for securing said labels on said boxes.

2. In an organized machine of the character described, a rotatable table for supporting the boxes, means for guiding a label strip across said table mechanism for printing the labels, a device for cutting said labels and placing them on the boxes, means for securing the labels on the boxes, and means for removing the labeled boxes from their said table.

3. In an organized machine of the character described, a rotatable table for supporting the boxes, means for guiding a label strip across said table mechanism for printing the labels, a device for cutting said labels and placing them on the boxes, means for securing said labels on the boxes, and means for

automatically bodily lifting and removing said boxes from said table.

4. In a machine of the character described, a rotatable table, supports for boxes thereon, means for guiding the tape over the table, devices for automatically feeding said tape across said table, means for printing the labels on the tape, a device for automatically cutting said labels from said tape and placing them in position on the boxes and means for securing said labels on the boxes.

5. In a machine of the character described, a table, supports for boxes thereon, a reciprocating slide adapted to rotate said table, means for guiding a movable tape across the table, mechanism for printing the labels thereon, a device for cutting said labels from said tape and placing them in position on the boxes, means for securing said labels in place and means for automatically removing the labeled boxes from their supports.

6. In a machine of the character described, a rotatable table, supports for boxes thereon, recesses in said table, a reciprocating slide, a pawl carried thereby and adapted to enter one of said recesses to rotate said table, means for guiding a movable tape across said table, mechanism for printing the labels thereon, a device for cutting said labels from said tape and placing them in position on the boxes, means for securing said labels in place, and means for automatically removing the labeled objects from their supports.

7. In a machine of the character described, a table, supports for boxes thereon, recesses in said table, a reciprocating slide, a pawl carried thereby and adapted to enter one of said recesses and rotate said table, means for permitting a dwell in the reciprocation of said slide, means for guiding a movable tape across said table, mechanism for printing labels thereon, a device for cutting said labels from said tape and placing them in position on the boxes, means for securing said labels on the boxes, and means for automatically bodily lifting and removing the labeled boxes from their supports.

8. In a machine of the character described, a table, supports for boxes thereon, a reciprocating slide adapted to rotate said table, means coacting with said slide to automatically lock and unlock said table, means for guiding a movable tape across said table, mechanism for printing labels thereon, a device for cutting said labels and placing them in position on the boxes, means for securing said labels in place and means for automatically bodily lifting and removing the labeled boxes.

9. In a machine of the character described, a reciprocating slide, a table, means for automatically rotating the same, means whereby said table is locked in position and unlocked therefrom, supports for boxes on said table, means for guiding a movable tape across said

table, a feeding mechanism therefor, a die adapted to print on said tape, a cutter actuated simultaneously with said die for cutting a label out of said tape and placing the same in position on the box, means for securing said label on said boxes and means for automatically bodily lifting and removing the labeled boxes from their supports.

10. In a machine of the character described, a table, a reciprocating slide adapted to automatically lock and unlock and rotate said table, supports for boxes on said table, means for guiding a movable tape across said table, a printing die coacting therewith, a spring pressed cutter for cutting out the labels and placing them in position on the boxes, means for securing said labels on said boxes and a device for automatically removing the labeled boxes from their supports.

11. In a machine of the character described, a table, a reciprocating slide adapted to automatically lock and unlock and rotate said table, supports for the boxes on said table, means for guiding a movable tape across said table, a printing die coacting therewith, a spring pressed cutter for cutting labels from said tape and placing them in position on the boxes, means for securing said labels on said boxes and a pair of automatically actuated tongs for removing said boxes from their supports.

12. In a machine of the character described, a rotatable table, anvil blocks thereon for the unlabeled objects, means for printing and cutting out the labels and placing them in position on the objects and means for operating a swage after the anvil blocks are brought thereunder and means for automatically removing the labeled objects from said blocks after the swaging operation.

13. In a machine of the character described, a rotary table, box supporting anvils thereon, a driving shaft, and a plurality of means actuated thereby for simultaneously printing and cutting out a label as well as swaging the label in place and for bodily lifting the labeled boxes and ejecting them to one side.

14. In a machine of the character described, a driving shaft, a cross-head reciprocated thereby, a printing die, a cutter and a swage actuated by the downward stroke of said cross-head and means actuated by the upward stroke of said cross-head for removing the boxes.

15. In a machine of the character described, a driving shaft, a slide actuated thereby, a table rotated by said slide, anvil blocks secured on said table adapted to support the boxes, a swage actuated by said shaft and under which said boxes are moved by the rotation of said table, means for locking the latter in place and a pair of tongs adapted to automatically remove the completed box from its anvil block after the swaging operation.

16. In a machine of the character described, a driving shaft, a cross-head reciprocated thereby, a table adapted to be rotated, anvil blocks thereon adapted to hold the unlabeled boxes, means for moving a tape with respect to said boxes, and a die, a cutter and a swage all actuated by said cross-head and adapted to print, cut and swage a label in position on each of said boxes.

17. In a machine of the character described, a driving shaft, a slide reciprocated thereby, a rotatable table, recesses therein, a pawl on said slide adapted to enter one of said recesses and rotate said table on the reciprocation of said slide, a fixed table secured above said rotatable table, an opening through said fixed table, devices actuated by said shaft for feeding a tape, a die adapted to print on said tape, a cutter registering with said opening and adapted to cut out the printed matter, a cross head adapted to actuate said die and said cutter, a swage secured to said cross-head, anvil blocks on said rotatable table adapted to hold the boxes to be labeled which latter are brought successively under said cutter and said swage by the rotation of said table, and a crank arm secured to said cross-head and actuated by said shaft.

18. In a machine of the character described, a driving shaft, a slide reciprocated thereby, a rotatable table, recesses therein, a pawl on said slide and adapted to enter one of said recesses and rotate said table on the reciprocation of said slide, a fixed table secured above said rotatable table, an opening through said fixed table, devices actuated by said shaft for feeding a tape, a die adapted to print on said tape, a cutter registering with said opening and adapted to cut out the printed matter, a cross-head adapted to actuate said die and said cutter, a swage secured to said cross-head, anvil blocks on said rotatable table adapted to hold the boxes to be labeled which latter are brought successively under said cutter and said swage by rotation of said table, means for producing a dwell in the reciprocation of said slide, and a crank arm secured to said cross-head and actuated by said shaft.

19. In a machine of the character described, a driving shaft, a slide reciprocated thereby, a rotatable table, recesses therein, a pawl on said slide adapted to enter one of said recesses and rotate said table on the reciprocation of said slide, a fixed table secured above said rotatable table, an opening through said fixed table, devices actuated by said shaft for feeding a tape, a die adapted to print on said tape, a cutter registering with said opening and adapted to cut out the printed matter, a cross-head adapted to actuate said die and said cutter, a swage secured to said cross-head, anvil blocks on said rotatable table adapted to hold the boxes to be

labeled which latter are brought successively under said cutter and said swage by the rotation of said table, means for producing a dwell in the reciprocation of said slide, 5 means secured to said cross-head for automatically removing the completed boxes from said blocks.

20. In a machine of the character described, a driving shaft, a cam secured thereto, a crank loosely mounted on said shaft, rollers secured to said crank and traveling on the operative surface of said cam, a slide adapted to be reciprocated by said arm, a table adapted to be rotated by said slide, 15 anvil blocks on said table adapted to hold the unlabeled boxes, a fixed table secured above said rotatable table, an opening there-through, means for feeding a tape over said opening with which latter one of said blocks registers on the rotation of said table, a die adapted to print on said tape, a cutter registering with said opening and adapted to cut a label from said tape, means for actuating 20 said die and said cutter and a swage for swaging said label in position on a box.

21. In a machine of the character described, a driving shaft, a cross-head reciprocated thereby, a slide, means actuated by said shaft for reciprocating said slide, 25 means for feeding a tape, a die located above said tape, an ink roller carried by said slide and adapted to ink said die, means for actuating said die, a table adapted to be rotated by said slide, blocks thereon for holding the boxes to be labeled, means for automatically locking and unlocking said table, a cutter located above one of said blocks and adapted to cut out of said tape a printed label, and means for swaging said 30 label in place.

22. In a machine of the character described, a driving shaft, a cross head actuated thereby, tongs suitably pivoted thereto, a spring adapted to close said tongs and a rod 35 adjustably secured to the frame and adapted to automatically open said tongs as said shaft is actuated.

23. In a device of the character described, a driving shaft, a cross head, actuated thereby, tongs suitably pivoted thereto, the jaws of said tongs being provided with rubber tips, a cam adjustably secured to said cross-head for engaging one member of said tongs, a set screw adapted to adjust the relation of said 40 member with said cam, a spring adapted to close said jaws, the other of said tong members having the lever handle prolonged, a rod adjustable on said frame and adapted to contact with said lever arm to open said tongs.

24. In a machine of the character described, a frame, a table rotatably mounted thereon, a pair of standards on said frame on opposite sides of said table, a lower and an upper shaft mounted thereon, a ratchet 45 wheel, a feed roller and a gear mounted on

said lower shaft, a feed roller and a gear mounted on said upper shaft, said gear being adapted to coact with said lower gear, pawls adapted to coact with said ratchet wheels, means for simultaneously actuating said 70 pawls, means for guiding a tape over said table, a printing mechanism for said tape, a device for cutting labels from said tape and placing them on the unlabeled object and means for securing said labels in place. 75

25. In a machine of the character described, a frame, a table movable thereon, a pair of standards on said frame on opposite sides of said table, a lower feed roller mounted on each pair of standards, a ratchet wheel 80 and gear adapted to rotate with said roller, an upper shaft mounted in movable brackets above each lower roller, a feed roller and a gear carried thereby, springs adapted to coact with said brackets and hold said upper 85 and lower gears in engagement, pawls adapted to coact with said ratchet wheels, means for actuating said pawls, means for guiding a tape over said table, a lever adapted to coact with said brackets and raise said upper gears 90 out of engagement with said lower gears, a printing device adapted to print on said tape, means for cutting labels from said tape and placing them on the unlabeled objects, and means for securing said labels in place. 95

26. In a machine of the character described, a frame, a driving shaft, a slide reciprocated thereby, a table adapted to be rotated by said slide, an ink plate supported on said frame, a ratchet wheel adapted to rotate 100 with said plate, a pawl carried by said slide adapted to coact with said ratchet wheel, means for supporting a tape, a die adapted to print on said tape, an ink roller supported on said slide, and adapted to contact with said 105 plate and said die in order to ink the latter, means for feeding said tape, a device for cutting labels from said tape, and means for securing said labels in place.

27. In a machine of the character described, a frame, a driving shaft mounted thereon, a slide adapted to be reciprocated by said shaft, a pawl carried by said slide, an ink plate supported on said frame, a ratchet wheel adapted to coact with said pawl to rotate 110 said plate, a table adapted to be rotated by said slide, means for supporting a tape above said table, means for feeding said tape, a die adapted to print on said tape, an ink roller carried by said slide adapted to contact 115 with said ink plate and to ink said die, a pawl adapted to lock and unlock said table, a stud carried by said slide for actuating said pawl, means for cutting labels from said tape and means for securing said labels in place. 120

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Witnesses:

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